of the animal near the mouth of the shell, which is whitish or bluishwhite, bordered with the dark chestnut of the lip. (W. J. B.)

BULINUS BULLULA. Bul. testá ovato-rotundatá, diaphaná, albidá, anfractibus 4 ventricosis, lineis incrementi obliquè striatis; aperturá magná, subumbilicatá.

Long.  $1\frac{1}{8}$ ; lat. 1 poll.

Hab. in insulâ Mindoro.

Legit H. Cuming.

A milk-white line runs round the sutures. (W. J. B.)

Mr. Gould resumed the exhibition of his new species of Australian birds, and characterized the following species :--

EPHTHIANURA TRICOLOR. Ephth. vertice, pectore, tectricibusque caudæ coccineis; gutture albo.

Male.—Crown of the head, upper tail-coverts, breast and abdomen bright scarlet; lores, line above and beneath the eye, ear-coverts, occiput and back dark brown; wings brown, each feather margined with brownish white; tail dark brown, each feather having a large spot of white on the inner web at the tip; chin, throat and under tail-coverts white; irides straw-white; bill and feet blackish brown.

Female similar in colour, but having only a slight wash of the scarlet colouring, except on the upper tail-coverts, where it is as brilliant as in the male.

Total length,  $3\frac{1}{4}$  inches; bill,  $\frac{9}{16}$ ; wing,  $2\frac{3}{4}$ ; tail,  $1\frac{1}{2}$ ; tarsi,  $\frac{3}{4}$ . Hab. ——?

MYZANTHA OBSCURA. Myz. fronte flavescente-olivaceo; gutture, uropygio, et corpore subtùs cinereis,—plumis pectoralibus lunulá apicem versus notatis, et ad apicem pallidè cinereis.

Forchead yellowish olive; lores, line beneath the eye and earcoverts black; head and all the upper surface dull grey, with an indistinct line of brown down the centre of each feather, giving the whole a mottled appearance; wings and tail brown, margined at the base of the external webs with wax-yellow, the tail terminating in white; throat and under surface dull grey, becoming lighter on the lower part of the abdomen and under tail-coverts; the feathers of the breast with a crescent-shaped mark of light brown near the extremity, and tipped with light grey; irides dark brown; bare skin round the eye, bill, and bare patch on each side of the throat, bright yellow; legs and feet dull reddish-yellow; claws dark brown.

Total length,  $9\frac{1}{2}$  inches; bill,  $1\frac{1}{4}$ ; wing,  $5\frac{1}{2}$ ; tail,  $4\frac{5}{8}$ ; tarsi,  $1\frac{1}{8}$ . *Hab.* Western Australia.

PTILOTIS SONORUS. Ptil. loris et strigå per oculos ductá, ad colli latera, nigris plumis auricularibus flavis,—et ponè has, notá sordidè albá;—gutture et abdomine pallidè fluvescenti-cinereis, fuscostriatis.

Crown of the head and all the upper greyish olive; wings and tail brown, margined on their external webs with greenish yellow; lores, space around the eye and broad line down the sides of the

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neck black; ear-coverts pale yellow, behind which is an obscure spot of greyish white; throat and under surface pale yellowish grey striated with light brown; irides dark brown; bill black; legs and feet greenish grey. The female like the male in colour, but smaller in all her dimensions.

Total length,  $7\frac{1}{2}$  inches; bill, 1; wing,  $3\frac{3}{4}$ ; tail,  $3\frac{1}{2}$ ; tarsi, 1. *Hab.* South and Western Australia.

PTILOTIS CRATITIUS. Ptil. vertice cinereo,—loris, striga superoculari, et plumis auricularibus nigris,—infrà et ponè has, penicillo angusto, et flavo; a rictu per gulæ latera ducta appendice nudo, corneo, ad marginem inferiorem libero, et bellè e gilvo cærulescente.

Crown of the head grey; all the upper surface olive-green; wings and tail brown, margined with greenish yellow; lores, a large space surrounding the eye and the ear-coverts black, below which is a narrow line of bright yellow; from the gape, down each side of the throat for five-eighths of an inch, a naked fleshy appendage, free at the lower end, of a beautiful lilac colour and very conspicuous in the living bird; anterior to this is a tuft of bright yellow feathers; throat and under surface olive-yellow; irides and eyelash black; bill black; feet blackish brown tinged with olive.

The female is similar to the male, but smaller.

Total length, 7 inches; bill,  $\frac{7}{6}$ ; wing,  $2\frac{1}{2}$ ; tail,  $3\frac{1}{2}$ ; tarsi,  $\frac{7}{6}$ . *Hab.* Interior of South Australia and Kangaroo Island.

GLYCIPHILA ALBIFRONS. Glyc. facie albá; gutture nigro, albo minutè adsperso; vertice nigro, plumis albo angustè marginatis.

Forehead, lores and a narrow ring round the eye, and a narrow line running from the angle of the lower mandible white; crown of the head black, each feather slightly margined with white; earcoverts silvery blackish gray, behind which an irregular line of white; all the upper surface brown, irregularly margined with white, producing a mottled appearance; wings and tails brown, the primaries margined externally with yellowish green; chin and throat brownish black, the former minutely speckled with white; under surface of the wing buff; chest and abdomen white, striped with blackish brown on the flanks; irides dark brown; bill black; feet blackish brown.

The female is like the male in plumage, but smaller in size. Total length,  $5\frac{5}{4}$  inches; bill,  $\frac{5}{4}$ ; wing,  $3\frac{1}{4}$ ; tail,  $2\frac{5}{4}$ ; tarsi,  $\frac{7}{8}$ . *Hab.* Western Australia.

MELIPHAGA MYSTACALIS. Mel. vertice et gutture nigris; strigd superoculari angusta, alba; plumis auricularibus densis, albis, et penicillum posticè acutum efficientibus.

Head, chin and throat black; over the eye a narrow line of white; ears covered by a conspicuous tuft of white feathers, which are closely set and terminate in a point towards the back; upper surface brownish black, the feathers edged with white; under surface white, with a broad stripe of black down the centre of each feather; wings and tail blackish brown, conspicuously margined with bright yellow; irides brown; bill black; feet blackish brown. Total length,  $6\frac{1}{2}$  inches; bill, 1; wing, 3; tail,  $2\frac{3}{4}$ ; tarsi, *Hab.* Western Australia. Nearly allied to *Meliphaga sericea*.

PLATYCERCUS ADELAIDÆ. Plat. vertice, pectore, abdomine medio, crissoque coccineis; lateribus viridescenti-flavis; uropygio sordidè olivaceo-flavo.

Fully adult male.—Crown of the head, lores, sides of the neck, breast and all the under surface scarlet, passing into pale greenish yellow on the flanks; cheeks and wing-coverts light lazuline blue; primaries deep blue, passing into black at the extremity; back of the neck yellowish buff; back black, each feather broadly margined with greenish yellow, some of these marginations tinged with blue, others with scarlet; rump and upper tail-coverts dull greenish yellow, the latter tinged with scarlet; two centre tail-feathers greenish blue; the remainder deep blue at the base, gradually becoming lighter until almost white at the tip; irides brown; bill horn-colour; feet gravish brown.

Total length,  $13\frac{1}{2}$  inches; wing, 7; tail, 8; tarsi,  $\frac{3}{4}$ .

Hab. South Australia.

This species is subject to great change from youth to maturity; during the first few months it is almost wholly green, and this gradually gives place to scarlet on the head, rump, under surface and the margins of the back-feathers.

AQUILA MORPHNOÏDES. Aq. capite cristá suboccipitali brevi, ornato; facie nigrescente: corpore subtùs rufo: plumis et pectoris et abdominis strigá centrali nigrá notatis.

Face, crown and throat blackish brown, tinged with rufous, giving it a striated appearance, bounded in front above the nostrils with whitish; feathers at the back of the head, which are lengthened into a short occipital crest, back of the head, back, and sides of the neck, all the under surface, thighs and under tail-coverts rufous, all but the thighs and under tail-coverts with a stripe of black down the centre of each feather; back, rump and wings brown, the centre of the wing lighter; primaries brownish black, becoming darker at the tip, and barred throughout with grayish buff, which is conspicuous on the under surface, but scarcely perceptible on the upper, except at the base of the inner webs; under surface of the wing mottled with reddish brown and black ; tail mottled grayish brown, crossed by seven or eight distinct bars of blackish brown, the tips being lighter; cere and bill lead-colour, passing into black at the tip; eye reddish hazel, surrounded by a narrow blackish brown eyelash; feet and toes very light lead-colour.

Total length,  $21\frac{1}{2}$  inches; bill,  $1\frac{3}{4}$ ; wing, 15; tail,  $9\frac{1}{2}$ ; tarsi,  $2\frac{3}{4}$ .

This species is very robust, and although but a small bird, is in every respect a true Aquila. It is nearly allied to, but much stouter than Aquila pennata.

Hab. Yarrundi on the Upper Hunter, New South Wales.

BUTEO MELANOSTERNON. B. rostro grandi, et elongato : guld, pec-

tore et abdomine nigris; primariis ad basin subtùs albis; caudă cinerea.

Crown of the head, face, chin, chest and centre of the abdomen, deep black, passing into chestnut-red on the flanks, thighs and under tail-coverts; back of the head chestnut-red, becoming black in the centre of each feather; shoulders whitish buff; all the upper surface deep brownish black, margined with chestnut-red; primaries white at the base, deep black for the remainder of their length; cere and base of the bill purplish flesh-colour, passing into black at the tip; irides wood-brown; feet white tinged with lilac.

Total length, 22 inches; bill,  $2\frac{1}{2}$ ; wing,  $19\frac{1}{2}$ ; tail,  $8\frac{1}{2}$ ; tarsi,  $2\frac{5}{8}$ .

This species is nearly allied to the Red-tailed Hawk of North America, and the *Buteo Jackal* of South Africa, but from both of these it may be distinguished by the jet-black colouring and by its more lengthened bill. During flight the white at the base of the primaries is very conspicuous, and is strikingly contrasted with the black of the chest and the brown of the other part of the wings.

Hab. Interior of New South Wales.

FALCO HYPOLEUCOS. Fal. corpore superad cinereo-fusco: singulis plumis margine dilutiore cinctis: corpore subtùs albo; plumis strigd fusca apud apicem in maculam latam desinente, ornatis.

Head and all the upper surface grayish brown, the feathers of the head having a fine stripe of black down the centre, the remainder dark brown in the centre; chin and all the under surface white, with a fine line of black down the centre, passing into a spatulate form near the tip; outer webs and tips of the primaries brownish black, the extreme ends being whitish; their inner webs whitish, crossed by numerous narrow bars, fading into a point as they approach the edge; tail gray, obscurely barred with brown, and tipped with buff.

Total length 17 inches; bill,  $1\frac{1}{4}$ ; wing,  $12\frac{1}{2}$ ; tail,  $7\frac{1}{2}$ ; tarsi,  $1\frac{3}{4}$ . Considerably smaller, but closely allied to the Jerfalcon, *Falco* 

Islandicus.

Hab. Western Australia.

PODARGUS BRACHYPTERUS OF MACRORHYNCHUS. Pod. rostro prægrandi (ad magnitudinem corporis ratione habitd) et producto; colore corporis obscuro, et minuté punctulato.

Crown of the head and all the upper surface finely freckled gray and brown, with a stripe of black down the centre of each feather, the light colour predominating on the scapularies; feathers between the eyes and the nostrils chestnut-brown, sprinkled with black and tipped with white; shoulders and lesser wing-coverts deep reddish brown; some of the feathers tipped with a white spot, freckled with red in the centre; greater coverts and secondaries mingled gray and reddish brown, the former tipped like the lesser coverts; primaries reddish brown, regularly barred with buffy-white on their outer webs, and with interrupted tawny bands on their inner webs; tail lightbrown, freckled with black and gray, and crossed by numerous irregular, narrow, dark-brown bands, freckled with gray; all the under surface grayish white, each feather crossed by numerous fine and irregular bars of tawny and with a stripe of brown down the centre, the latter colour becoming chestnut and forming a semilunar mark down each side of the neck; thighs black; irides light yellow; bill and feet brown.

Total length 15 inches; bill, 25; wing, 9; tail, 7; tarsi, 11.

In its general appearance this bird closely resembles the *Podargus* humeralis, but is even smaller in size than *P. Cuvieri*, while at the same time the bill is fully equal in size to that of the former species; it also projects much farther from the face than in any other species inhabiting Australia.

Hab. Swan River, Western Australia.

MALURUS MELANOTUS. Mal. vertice, guld, abdomine, humeris, caudæque tectricibus lazulino-cæruleis; loris, nuchd, vitta pectorali et dorso imo nigris.

Male.—Crown of the head, crescent-shaped mark on the back, upper tail-coverts, throat and under surface rich metallic lazuline blue; ear-coverts metallic verditer-blue; lores, collar round the back of the neck, line from the base of the lower mandible down the sides of the neck, band across the breast and lower part of the back jetblack; wings brown, margined with pale green; tail greenish blue, tipped with grayish white; irides, bill and feet black.

*Female.*—Lores rufous; head and all the upper surface rufous brown; all the under surface brownish white; tail bluish green, tipped with grayish white; bill rufous; irides blackish brown; feet brown.

Total length,  $4\frac{3}{4}$  inches; bill,  $\frac{1}{2}$ ; wing, 2; tail,  $2\frac{1}{4}$ ; tarsi,  $\frac{7}{4}$ .

This beautiful species may be distinguished from the *Malurus* pectoralis by its rather smaller size, and by the black band across the back.

Hab. Western belts of the Murray in Western Australia.

Colluricincla Brunnea. Coll. corpore superné fusco; sic et corpore subtùs, at colore multo dilutiore; rostro nigro.

All the upper surface pale brown; primaries and tail the same, but somewhat lighter; all the under surface brownish white, becoming almost pure white on the vent and under tail-coverts; thighs grayish brown; bill black; feet blackish brown.

Total length,  $9\frac{1}{2}$  inches; bill,  $1\frac{1}{8}$ ; wing,  $4\frac{3}{4}$ ; tail,  $4\frac{1}{4}$ ; tarsi,  $1\frac{1}{4}$ .

The sexes are alike in plumage.

This species rather exceeds in size the *Colluricincla cinerea*, Vig. and Horsf., and has a more curved, longer and stouter bill.

Hab. The north-west coast of Australia.

## COLLURICINCLA RUFIVENTRIS. Coll. corpore supernè intensè cinereo, olivaceo levitèr tincto; abdomine imo, crissoque rufis.

Lores grayish white; crown of the head and all the upper surface deep gray, slightly tinged with olive; primaries and tail dark brown, margined with brownish gray; throat and under surface darkish gray, passing into buff on the vent and under tail-coverts; all the feathers of the under surface have a narrow dark line down the centre; thighs gray; irides dark brown; bill black; feet dark brown.

Total length  $8\frac{1}{2}$  inches; bill, 1; wing, 5; tail,  $4\frac{1}{4}$ ; tarsi,  $1\frac{1}{4}$ .

The sexes are alike in colour.

About the size of *Colluricincla cinerea*, Vig. and Horsf., from which it may be distinguished by the uniform colouring of the back and the buffy tint of the lower part of the abdomen and under tail-coverts. *Hab.* Swan River, Western Australia.

PACHYCEPHALA RUFOGULARIS. Pach. mas : corpore supernè fuscescenti-cinereo ; guld et corpore subtùs rufis ; pectore vittà fuscescenti-cinered obscurè notatà.

Fam. a mare differt corpore subtùs albescenti-cinereo haud rufo.

Male.—Crown of the head and all the upper surface deep brownish gray; wings and tail dark brown, the feathers margined with grayish brown; lores, chin, throat, under surface of the shoulder and all the under surface reddish sandy brown, crossed on the breast by a broad irregular band of grayish brown; irides reddish brown; bill black; feet blackish brown.

*Female.*—Differs from the male in having the throat and under surface grayish white, the chest being crossed by an obscure mark of grayish brown and with a line down the centre of each feather.

Total length, 7 inches; bill,  $\frac{3}{4}$ ; wing,  $4\frac{1}{4}$ ; tail,  $3\frac{1}{2}$ ; tarsi, 1.

This species is somewhat allied to *P. pectoralis*, but may be distinguished from it by the rufous colouring of the throat, and by the band across the chest being grayish brown instead of black.

Hab. South Australia.

PACHYCEPHALA INORNATA. Pach. olivaceo-fusca, abdomine pallidiore; plumis corporis inferioris striga fusca centrali leviter notatis.

All the upper surface grayish olive; wings and tail brown, the feathers of the former broadly margined with lighter brown; all the under surface brownish gray, becoming nearly white on the vent and under tail-coverts, with a fine stripe of pale brown down each feather; irides dark brown; bill blackish brown, fleshy towards the base; feet blackish brown.

Total length, 7 inches; bill,  $\frac{3}{4}$ ; wing,  $3\frac{3}{4}$ ; tail,  $3\frac{1}{2}$ ; tarsi, 1.

This bird has somewhat the appearance of the young or female of *P. gutturalis*, but its larger size and shorter and more robust bill distinguish it from that species.

Hab. Belts of the Murray in South Australia.

ZOSTEROPS CHLORONOTUS. Zos. dorso olivaceo-viridi; gutture et crisso virescenti-flavis.

Lores black; crown of the head and all the upper surface olivegreen; primaries and tail feathers brown, margined with olive-green; throat and under tail-coverts light greenish yellow; breast and under surface gray, tinged with brown on the abdomen and flanks; irides wood-brown; bill brown, lighter on the under mandible; legs and feet dark-gray.

Total length,  $4\frac{1}{4}$  inches; bill,  $\frac{9}{16}$ ; wing,  $2\frac{1}{8}$ ; tail,  $1\frac{3}{4}$ ; tarsi,  $\frac{5}{3}$ . *Hab.* Western Australia. December 8.-W. H. Lloyd, Esq., in the Chair.

A paper by G. B. Sowerby, Esq., was read, in which the author continues his descriptions of the new shells collected in the Philippine Islands by H. Cuming, Esq.

HELIX MONTICULA. Hel. testá suborbiculari, subconicá, tenui, pallescente, lævi; spirá brevi, subpyramidali, obtusá; anfractibus quatuor tenerrimè (lineis incrementi) striatis, depressiusculis, ultimo magno, obtusissimè angulato, anticè depressiusculo, viridi; aperturá subtrapeziformi, ungulis posticis acutiusculis; peritremate angusto, tenuitèr reflexo, albo; columellá albá.

Long. 0.9; lat. 0.9 poll.

Hab. supra foliis arborum apud Lallo, provinciæ Cagayan insulæ Luzon, Philippinarum.

All the varieties of this pretty species are green in front, and the *apex* appears to be always colourless. The following six varieties occur:—

a. Yellow above; circumference orange-yellow; front green. From Lallo.

b. Yellow above; circumference orange-yellow, with a dark brown slightly interrupted band; green in front. From St. Jaun, in the province of Cagayan.

c. Yellowish white above, with a narrow dull yellowish green circumferential band; green in front. From Gattarang, in the province of Cagayan.

d. Volutions banded in the following order: band next to the suture yellowish white; then a pale green broader band; then a yellowish white band; then a dark brown circumferential band, with jagged edges; then another yellowish white band, and then green in front. From Lallo.

e. Small; pale yellowish, with a light band, consisting of short dark brown lines near to the suture; a dark brown circumferential band; front dull yellowish green. From St. Jaun.

f. Antesutural band consisting of irregular dark brown lines arranged side by side; then a yellowish white band; then a broad, dark brown, somewhat mottled and interrupted band; then another yellowish white band, and then the green front. From Abulug, in the province of Cagayan.

HELIX COCCOMELOS. Hel. testá subglobosá, tenuiusculá, lævi, anfractibus quatuor rotundatis, lævigatis, striis incrementi solùm insculptis, ultimo maximo; aperturá suborbiculari, peritremate reflexo; labio columellari albo, declivi, obtuso, depressiusculo.

Long. 1.3; lat. 1.4 poll.

Hab. supra foliis arborum ad insulam Tablas dictam Philippinarum. In general this species bears a great resemblance to a plum, for which reason I have called it *H. Coccomelos*. Several varieties may be distinguished.

a. Apex dark brownish red, softened off gradually to a pale yellowgreen, which becomes gradually darker, until the body of the last volution is of a fine dark green : lip white.

b. Similar to a, only dark brown instead of green.

c. Of a uniform very dark chocolate-brown, except the second and third volutions, which have a rather paler central band: lip chocolate.

d. Apex dark chocolate-brown; upper part of the spire of a pale dull yellowish colour, becoming darker and greener toward the last volution, where the ground-colour is olive-green; an antesutural dark red-brown broad band; a circumferential band of a rather darker colour, but rather narrower, and the columellar lip surrounded by a broad dark band, which is softened off into the dark olive-green ground-colour.

e. Of an uniform pale yellow-brown, becoming very dark near the back of the lip, where it is nearly black : lip chocolate. From Calbayog, island of Samar : found on leaves of trees.

f. Similar to e, but having two narrow dark brown bands: lip nearly black behind; white in front. From Calbayog.

HELIX INTORTA. Hel. testâ suborbiculari, subdepressâ, tenui, lævi, anfractibus  $4\frac{1}{2}$ , ventricosis, tenuissimè striatis, plerumque pallescente-flavidis, fasciis tribus castaneis ornatis; aperturâ sublunari, peritremate tenui, tenuiter reflexo; labio columellari rectiusculo, extùs inclinato, obtuso.

Long. 1; lat. 1.5 poll.

Hab. Supra foliis fruticum ad Loboc, insulæ Bohol, Philippinarum.
Several varieties of this beautiful species occur; most of them are marked with two brown bands, and have the circumference of the columella of the same colour; one is of an uniform pale brownish colour, and another is almost entirely of a very dark chocolate colour: a white line may be observed close to the suture in most of the varieties. The following are the most distinct varieties:—

a. Ground-colour pale yellowish; antesutural band very dark chestnut-brown; circumferential band of the same colour, and a broad band of the same surrounding the *columella*. From Loboc.

b. Similar to a, but considerably larger, and having a broader circumferential band. From Loboc.

c. Ground-colour of a pale brown hue; bands the same as in a.

d. Smaller than a.: ground-colour pale greenish brown; bands nearly the same, but very dark and brilliant. From Loboc.

e. Ground-colour pale yellowish brown; antesutural band softened off in front; in other respects like a.

f. Ground-colour pale yellowish; bands pale chestnut-brown. From Loboc.

g. Ground-colour pale yellow; bands increasing in width toward the back of the mouth, where they unite, and where the brown colour extends from front to back of the shell: the peritreme is entirely white, and the circumference of the *columella* also. Found on leaves of trees on the island of Siguijor.

h. Ground-colour very pale yellowish; antesutural band very narrow and indistinct; circumferential band broad, pale, and rather irregular; lip and circumference of the *columella* white. From the island of Siquijor.

i. Shell entirely of a pale lemon-yellow, except only a narrow an-